

1. KUZIN, I. G.
2. USSR (600)
4. Foresters
7. Progressive workers of the Ilel forest conservation station. Les. khoz. 5, no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953, Unclassified.

KUZIN, I. I.,

OLEYNIKOV, V. S., gornyy inzhener; VERESA, F. I., gornyy inzhener; KUZIN, I. I.,
konstruktor

Adopting high capacity cars in the Ingulets mine. Gor.zhur. no.5:
37-40 My '55. (MLRA 8:7)
(Ingulets--Mine haulage)

BUZIN, I.L.

Recent tectonic movements in the northwestern part of the West
Siberian Plain. Trudy VNIGRI no.158:219-229 '60. (MIRA 14:3)
(West Siberian Plain—Geology, Structural)

KUZIN, I.L.; REYNIN, I.V.; CHOCHIA, N.G.

Basic characteristics of the Quaternary paleogeography of the
West Siberian Plain in connection with its glaciation. Trudy
Vsegei 64:61-70 '61. (MIRA 15:6)
(West Siberian Plain--Paleogeography)
(West Siberian Plain--Glacial epoch)

CHOCHIA, N.G.; GALERKINA, S.G.; DROZNES, M.A.; ZAKHAROV, Yu.F.; KROKHIN,
I.P.; KUZIN, I.L.; LAZUKOV, G.I.

Geology of the Muzhi Urals. Trudy VNIGRI . no.186:152-175 '61.
(MIRA 15:3)

(Ural Mountains--Geology)

KUZIN, I.L.

Role of crustal movements and fluctuations of the ocean level
on the formation of the relief in the northern part of the
West Siberian Lowland. Trudy VNIGRI no.186:203-211 '61.
(MIRA 15:3)
(West Siberian Plain--Landforms)

KUZIN, I.L.

Pliocene age of Quaternary sediments in the northern regions
of the West Siberian Plain and East European Plain. Trudy
VNIGRI no.220. Geol. sbor. no.8:80-92 '63.
(MIRA 17:3)

KUZIN, I.L.; PASUMANSKIY, I.M.; PERUGIN, N.N.; CHOCHIA, N.G.

Some methods for determining recent tectonic movements in oil-bearing platform areas. Trudy VNIGRI no.225:192-205 '63.

(MIRA 17:3)

KUZIN, I.L.

Geomorphological levels in the north of Western Siberia. Trudy
VNIGRI no.225:330-339 '63. (MIRA 17:3)

1. REZIN, Eng. I.M.
2. USSR (600)
4. Saws
7. Universal circular saw for cutting crate boards. Les. prom. 12 no. 12 1952
9. Monthly List of Russian Accessions, Library of Congress, March 1953

KUZIN, I.P.

Terminal ileitis in a 6-year-old child. Khirurgiia 39 no.4:
149-150 Ap'63 (MIRA 17:2)

1. Iz khirurgicheskogo otdeleniya Zaigrayevskoy rayonnoy
bol'nitsy (glavnyy vrach N.S.Protasova) Buryatskoy ASSR.

S/049/61/000/005/001/013
D216/D306

AUTHORS: Fedotov, S.A., Aver'yanova, V.N., Bagdasarova, A.M.,
Kuzin, I.P., and Tarakanov, R.Z.

TITLE: Some results of a detailed study of the seismicity
of the South Kurile islands

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya geofiziches-
kaya, no. 5, 1961, 633-642

TEXT: This paper reports the results of observations carried out
by the Institut fiziki zemli, AN SSSR (Institute of Physics of the
Earth, AS USSR) and the Sakhalinskiy kompleksnyy nauchno-issle-
dovalel'skiy institut AN SSSR (Sakhalin Scientific Research In-
stitute for Comprehensive Studies, AS USSR) between 1957 and 1960
at high sensitivity seismic stations, concentrated on determining
the energies and the coordinates of the foci of earth tremors in
the region studied. The method of Yu. V. Riznichenko (Ref. 5: Me-
tody massovogo opredeleniya koordinat ochagov blizkikh zemletry-
aseniy i skorostey seysmicheskikh voln v oblasti raspolozheniya

Card 1/5

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Some results of a ...

S/049/61/000/005/001/013
D216/D306

ochagov (Methods of Mass Determination of Coordinates of the Foci of Nearby Tremors and the Velocities of Seismic Waves in the Regions of Location of the Foci), Izv. AN SSSR, ser. geofiz., no.4, 1958) was used to determine the coordinates of the foci, since it enabled fast and accurate assessment of the epicenter and depth of the focus for any law of change of wave velocity with depth.

Hodographs of small tremors gave \bar{v}_{s-p} in the crust = 8.4, $\bar{v}_p = 6.1$, and $\bar{v}_s = 3.5$ km/sec, with the thickness of the crust 20 - 30 km. The velocity of seismic waves in the upper shell of the earth was found from close tremors with depths of foci from 30 - 120 km, refraction at the bottom of the crust being allowed for. The time t_{s-p} recorded at a station was converted into a time for a point 30 km under the station using a nomogram, and this was used to fix a more accurate position of the epicenter. Riznichenko's method (Ref. 5: Op. cit.) then gave the depth of the focus in relation to the 30 km level, the time at a depth of 30 km under

Card 2/5

Some results of a ...

S/049/61/000/005/001/013
D216/D306

the epicenter, and the mean velocity of the seismic waves in the shell. From the results, at depths of 30 - 100 km, $\bar{v}_{s-p} = 10.6$ km/sec and the mean value of $v_p/v_s = 1.74$, giving mean P- and S-wave velocities of 7.8 and 4.5 km/sec respectively. At 50 - 80 km depth, $v_p/v_s = 1.71 - 1.72$, implying some decrease of v_p and v_s for constant \bar{v}_{s-p} . Due to the distribution of foci in this region both above and below the depth, at which strong absorption of seismic wave energy begins, energetic classification of tremors was made by estimating the energy of the volume wave. The absorption in the shell and crust of the earth were estimated from the variation of the energy current of seismic waves per unit area with epicentral distance for tremors with different focal depths. It was found that for epicentral distances from 35 - 150 km, and depths of focus from 0 - 10 km, the coefficient of energy absorption = $0.008 \pm 0.001 \text{ km}^{-1}$ for the predominating S-wave with a frequency of 3 - 5 c/s. The mean coefficient of energy absorp-

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Some results of a ...

S/049/61/000/005/001/013
D216/D306

tion in the shell was found to be 0.007 km^{-1} in the layer at 30 - 50 km depth, and 0.02 km^{-1} in the layer at 30 - 80 to 90 km depth, both at about 3 c/s frequency. The observations indicate that the earth's crust and upper shell layer in the Okhotsk Sea and under the S. Kurile Islands have a low seismicity, despite the recent volcanic activity there. Particular attention is paid to a catastrophic tremor on November 6, 1958, at 22.58 ($\varphi_N = 44.2^\circ$, $E = 148.5^\circ$, $h = 90 \text{ km}$, $M = 8.2$), for which the linear dimensions of the focus were up to 80 km. There are 12 figures and 11 references: 9 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: J. Lehmann, Velocities of longitudinal waves in the upper part of the earth's mantle. Ann. geophys., 15, no. 1, (1959); N. V. Shebalin, Correlation between magnitude and intensity of earthquakes: asthenosphere. Publ. BCSI, ser. A, Tr. Sci., Fasc. 20, Toulouse, (1959).

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki zemli (Academy

Card 4/5

Some results of a ...

S/049/61/000/005/001/013
D216/D306

of Sciences, USSR, Institute of Physics of the Earth)

SUBMITTED: September 15, 1960

Card 5/5

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1

L 10186-63

EWT(1)/BDS--AFFTC/ESD-3--TF

ACCESSION NR: AP3001047

S/0049/63/000/005/0670/0686

AUTHOR: Fedotov, S. A.; Kuzin, I. P.

TITLE: Velocity profile of the upper mantle in the area of the southern Kurile Islands

SOURCE: AN SSSR. Izv. Seriya geofizicheskaya, no. 5, 1963, 670-686

TOPIC TAGS: seismic wave velocities, upper mantle, Moho discontinuity

ABSTRACT: A rapid method for constructing velocity profiles using Yu. V. Riznichenko's theoretical hodographs was investigated using data from the near subcrustal seismic zone of the southern Kurile Islands. To avoid errors due to irregularities in the upper crust, arrival times were measured from near the base of the crust 20 km below the stations. Corrections were introduced to compensate for the intervening thickness of the crust. The accuracy of this method, with corrections for a depth of 40--50 km, was + or - 0.2 sec; the systematic error in determining focal depth was about 2 km. From the base of the crust down to 80 km, $V_{\text{sub } p} = 7.7 \text{ km/sec}$ and $V_{\text{sub } s} = 4.4 \text{ km/sec}$. Velocity increases with depth below 80 km. Surface waves indicate the existence of two types of structure of

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ACCESSION NR: AP3001047

the upper mantle: continental and oceanic. The low velocities at the Moho (probably due to magmatic activity), the absence of a wave guide, and the small decrease of velocity (0.1--0.2 km/sec) at 50--80 km indicate the possibility of a third type of structure called the "upper mantle of an island arc." The method is applicable to seismic areas with intermediate [70--300 km] focal depths. Orig. art. has: 10 figures, 5 tables, and 4 formulas.

ASSOCIATION: Akademiya nauk SSSR. Institut fiziki Zemli (Academy of Sciences SSSR. Institute of Physics of the Earth)

SUBMITTED: 29Jun62

DATE ACQ: 19Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 009

OTHER: 017

Card

2/2

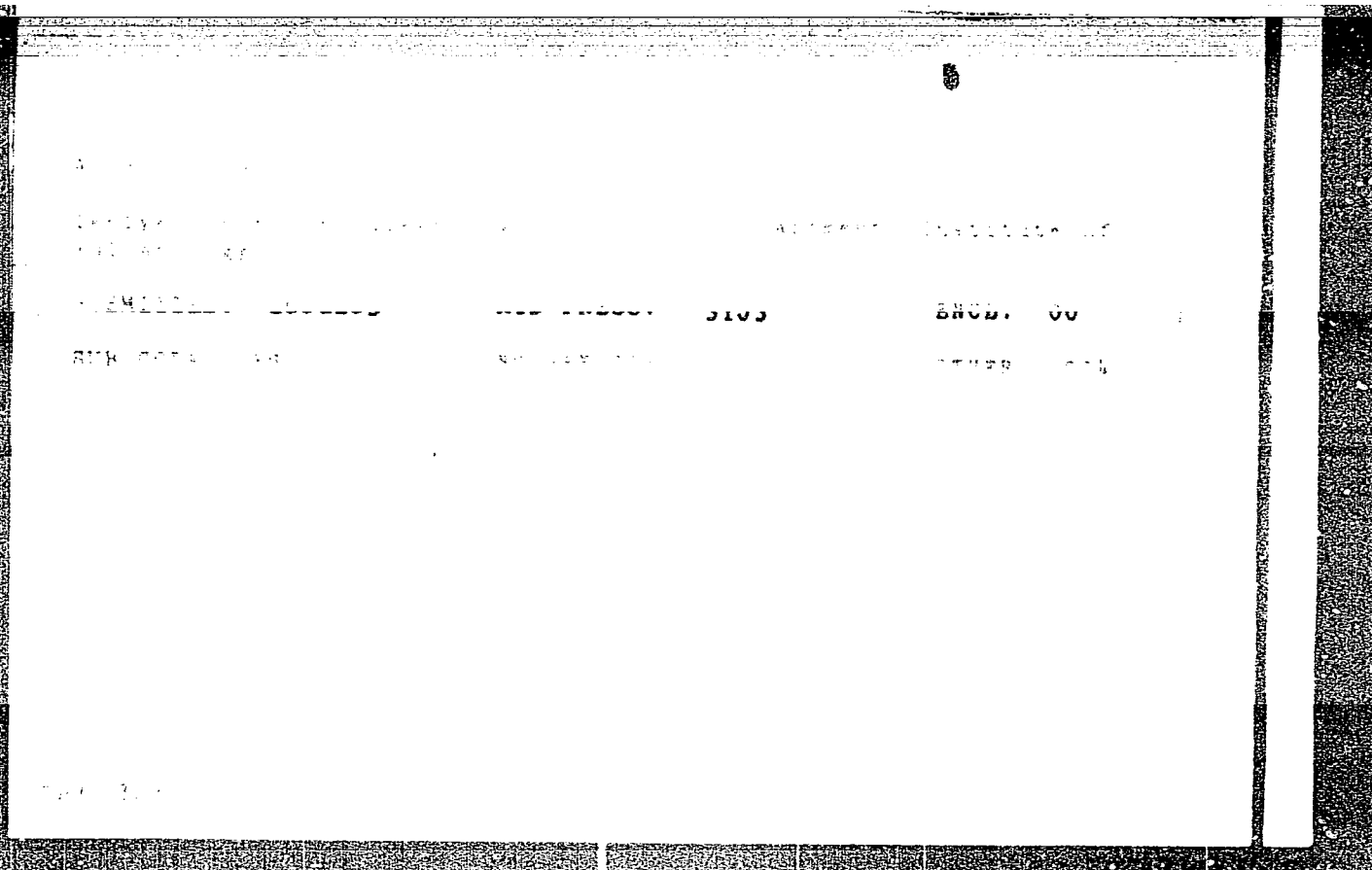
[illegible][illegible]

SOURCE: AN 3004 Izvestiya Seriya politicheskaya, no 9, 1964.

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The number of transformed cells was determined by the number of colonies obtained after 48 h of growth on the selective medium. The results are the mean of three independent experiments. Error bars represent the standard deviation.

ABSTRACT: The results of observations made at a network of seismic stations established by a special Pacific seismic expedition to the islands of the Pacific Ocean in 1962 are presented. The instruments, methods of observation, and the results of the expedition are described. Clearly the same as those of the 1958-1961 expedition to the Kurile Islands from 1958 to 1962. It has been experimentally established that near-earthquakes with $M \geq 10$ are clearly recorded at distances of 200-300 km. On the basis of the seismic materials gathered during the first year at Kamchatka, it was possible to compile a map of epi-

Cord 1/3



GORYACHEV, A.V.; YERSHOV, I.A.; KIRILLOV, F.A.; KUZIN, I.P.;
LYAMZINA, G.A.; MEDVEDEV, S.V.; POPOV, V.V.; FEDOTOV, S.A.;
SHTEYNBERG, V.V.

Seismic microzoning of the Petropavlovsk-Kamchatskiy area.
Trudy Inst. fiz. Zem. 28 Vop. inzh. seism. no.8:3-60 '63.
(MIRA 16:11)

FEDOTOV, S.A.; BAGDASAROVA, A.M.; KUZIN, I.P.; TARAKANOV, R.Z.

Seismicity and the subsurface structure of the southern part
of the arc of the Kurile Islands. Dokl. AN SSSR 153 no.3:
668-671 N '63. (MIRA 17:1)

1. Institut fiziki Zemli im. O.Yu. Shmidta AN SSSR. Pred-
stavleno akademikom V.S. Sobolevym.

KUZIN, I.S., inzhener; KOZAN, S.Ya., inzhener.

Domestic electric instrument production during the first postwar five-year plan. Vest.elektroprom. 18 no.11:19-22 N '47. (MLRA 6:12)

1. Glavmochelektropribor MEP.
(Electric apparatus and appliances)

KUZIN, I.S.

Characteristics of the osmotic properties of cell sap in different
parts of the fruit tree crown. Biul. nauch.-tekhn. inform. TSGL
no. 3:28-31 '57. (MIRA 11:8)

(Fruit trees)
(Plant cells and tissues)
(Plant cuttings)

KUZIN, I.S.

Transpiration intensity of leaves and the total amount of ash in
apple tree plants raised from buds taken from different parts of the
apple tree crown. Biul. nauch. inform. TSGL no.7/8:161-166 '59.
(MIRA 13:1)

(Apple) (Budding)

KUZIN, I.S., mladshiy nauchnyy sotrudnik

Growth and winter hardiness of apple seedlings grown from buds
of various parts of the tree crown. Trudy TSGL 7:209-217 '61.
(MIRA 15:10)

(Plants—Frost resistance) (Apple)

KUZIN, I.S.

Location of the shoot in the crown and the physiological characteristics of apple seedlings. Trudy TSGL 7:218-229 '61.

(MIRA 15:10)

(Apple) (Trees—Physiology)

SOV/120-58-6-29/32

AUTHORS: Dolgoshein, B. A. and Kuzin, L. A.

TITLE: A Fast Valve for Bubble Chambers (Bystrodeystvuyushchiy klapan dlya puzyr'kovykh kamer)

PERIODICAL: Pribery i tekhnika eksperimenta, 1958, Nr 6, p 116 (USSR)

ABSTRACT: A two-stage electromagnetic valve is described and is shown in Fig.1. As can be seen from this figure, pressure in volume 3 is transmitted via a rubber diaphragm 5 to the rod 7. The other end of this rod closes the outlet aperture to the main volume. The valve is operated electromagnetically by means of the valve 1. Various valves have been tried with outlet apertures of 14 and 40 mm in dia at a pressure of 40 atm. In these cases the electromagnet current was 15 to 20 mA. The delay time of the valve was 3 to 4 μ s. M. M. Veremeyev and N. Golubchikov are thanked for their assistance. There is 1 figure.

ASSOCIATION: Fizicheskiy institut AN SSSR (Physics Institute of the Academy of Sciences USSR)

SUBMITTED: December 13, 1957.

Card 1/1

BANNIK, B.P.; GALPER, A.M.; GRISHIN, V.G.; KOTENKO, L.P.; KUZIN, L.A.;
KUZNETSOV, Ye.P.; MERSON, G.I.; PODGORETSKIY, M.I.; SIL'VESTROV,
L.V.

Elastic scattering of 2.8 and 6.8 BeV/c negative pions on carbon.
Dubna, Izdatel'skii otdel Ob"edinennogo in-ta iadernnykh issledova-
nii, 1961. 20 p.

(No subject heading)

ALEKSANYAN, A.S.; ALIKHANYAN, A.I.; VEREMEYEV, M.M.; GAL'PER, A.M.;
KIRILLOV-UGRYUMOV, V.G.; KOTENKO, L.P.; KUZIN, L.A.; KUZNETSOV, Ye.P.;
MERZON, G...

Freon 570 liter bubble chamber. Prib. i tekhn. eksp. 6 no. 6:34-
38 N-D '61. (MIRA 14:11)

1. Fizicheskiy institut AN SSSR.
(Bubble chamber)

BANNIK, B.P.; GAL'PER, A.M.; GRISHIN, V.G.; KOTENKO, L.P.; KUZIN, L.A.;
KUZNETSOV, Ye.P.; MERZON, G.I.; PODGORETSKIY, M.I.; SIL'VESTROV, L.V.

Elastic scattering of 2.8 and 6.8 Bev./c π^+ -mesons on carbon.
Zhur. eksp. i teor. fiz. 41 no.5:1394-1401 N '61. (MIRA 14:12)

1. Ob"yedinennyy institut yadernykh issledovaniy i Fizicheskiy
institut imeni P.N. Lebedeva AN SSSR.

(Mesons--Scattering) (Carbon)

S/823/62/000/000/007/007
B125/B102

AUTHORS: Gal'per, A. M., Kuzin, L. A., Okonov, E. O. .

TITLE: The usability of bubble chambers for examining the decay properties of K_2^0 -mesons

SOURCE: Nekotoryye voprosy fiziki elementarnykh chastits i atomnogo yadra. Ed. by V. D. Mikhaylov and I. L. Rozental'. Mosk. inzh.-fiz. inst. Moscow, Gosatomizdat, 1962, 131-135

TEXT: Various possibilities of recording decay products of K_2^0 -mesons by using bubble chambers filled with various liquids were considered. Neutral decay products (π^0 and γ) of K_2^0 -mesons were found to be recorded most efficiently by the use of xenon chambers. In these, the high density of matter allows of slowing down the charged particles effectively but complicates the identification of pions and muons stopped at very short ranges. Propane chambers are very useful for identifying pions and muons but are less efficient when recording neutral decay products and for slowing down charged particles. Chambers filled with liquids having

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The usability of bubble chambers...

S/823/62/000/000/007/007
B125/B102

'intermediate' properties are best suited (e.g., Freon). Bubble chambers containing 50 % Freon 12 and 50 % Freon 13 record neutral pions and γ -quanta more efficiently than do propane chambers of equal size, and pions and muons can be better identified than in xenon chambers. In addition, xenon and Freon chambers can be used for studying the decay probability ratios

$$\frac{\omega(K_2^0 \rightarrow 3\pi^0)}{\omega(K_2^0 \rightarrow \pi^0 + \pi^+ + \pi^-)} \sim 2,$$

$$\frac{\omega(K_2^0 \rightarrow 3\pi^0) + \omega(K_2^0 \rightarrow \pi^0 + \pi^+ + \pi^-)}{\omega(K^+ \rightarrow \pi^+ + \pi^0 + \pi^0) + \omega(K^+ \rightarrow \pi^+ + \pi^+ + \pi^-)} \sim 1.$$

which follow from the selection rule $\Delta I = 1/2$. If a sufficient number of $K_2^0 \rightarrow \pi^+ + \pi^- + \gamma$ decay events could be found, it would be possible to study a pure $\pi\pi$ -interaction, to analyze spectra of muons and neutrinos for $K_{\mu 3}$ decays especially at fixed pion energies, to obtain information on the

Card 2/3

The usability of bubble chambers...

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B125/B102

interaction of K_2^0 -mesons, to examine the reaction $K_2^0 + (p,n) \rightarrow \Lambda^0 + p$ and the regeneration of K_1^0 -mesons in a beam of K_2^0 -particles, and to investigate the decay products of K_2^0 -mesons with a view to discovering new particles. In addition, this would make it possible to verify the selection rule $\Delta I = 1/2$ for lepton decays and would offer the very rare opportunity of checking the CP invariance in weak interactions directly by way of experiments. Big bubble chambers can also be used in the search for new neutral particles with lifetimes from 10^{-9} to 10^{-7} sec. There is 1 table.

Card 3/3

ACCESSION NR: AP4031191

S/0056/64/046/004/1504/1507

AUTHOR: Aleksanyan, A. S.; Alikhanyan, A. I.; Gal'per, A. M.; Kavalov, R. L.; Kirillov-Ugryumov, V. G.; Kotenko, L. P.; Kuzin, L. A.; Kuznetsov, Ye. P.; Marzon, G. I.

TITLE: Study of decays of K_2^0 mesons into three neutral pions

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1504-1507

TOPIC TAGS: neutral kaon decay, electron positron pair, kaon three pion decay, inelastic neutron interaction

ABSTRACT: This is an elaboration of an earlier preliminary report (Sb. Voprosy* fiziki elementarny*kh chastits. Izd. AN ArmSSR, Yerevan, 1963, p. 324). Some 50,000 stereo photographs were taken and the events classified as K^0 -meson decay were those with 3, 4, 5, or 6 electron-positron pairs directed approximately towards one point, and also V-events. The measure of the convergence of the γ quanta producing the pairs was the maximum distance h from the point of intersection of the trajectories of the two nearest γ quanta to the trajectories of the other γ quanta. Comparison of the histograms corresponding to different numbers of prongs indicates that definite physical reasons which lead to the appearance

ACCESSION NR: AP4031191

of three or more electron-positron pairs whose vertices are directed approximately towards one point. The calculated probability for the $K_2^0 \rightarrow 3\pi^0$ decay relative to all K_2^0 meson decay is 0.2 ± 0.06 . This agrees with theoretical predictions (23.6%) obtained by assuming the validity of the $\Delta T = 1/2$ rule. "The authors are grateful to E. O. Okonov for a discussion of several problems during the planning of the experiment, to Academician V. I. Veksler, I. V. Chuvilo, and the proton synchrotron crew for making the irradiation possible, and also to I. B. Vartazaryan, L. P. Kishinevskaya, N. V. Magradze, and the laboratory group for help in the reduction of the experimental material. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Fizicheskii institut im. P. N. Lebedeva Akademii nauk SSSR (Physics Institute, Academy of Sciences, SSSR); Moskovskiy inzhenerno-fizicheskii institut (Moscow Engineering Physics Institute); Fizicheskii institut GKAE, Yerevan (Physics Institute GKAE)

SUBMITTED: 25Jan64

DATE ACQ: 07May64

ENCL: 01

SUB CODE: NP

NR REF SOV: 004

OTHER: 001

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ACCESSION NR: AP4031191

ENCLOSURE: 01

1 Вид событий с элект- ронно-позитронны- ми парами	2 N _{полн.} A < 4.5 см	3 Число событий, произошедших в результа- те различных процессов, включая распады $K_S^0 \rightarrow 3\pi^0$			4 Число распадов $\rightarrow 3\pi^0$
		5 N _{случ}	N ($K_S^0 \rightarrow 3\pi^0$)	N _{яд} 6	
Six	1	0	0	0	1
Five	8	2	0	0	6
Four	28	8	3	0	17
Three	157	40	17	8	86
Сумма Sum	194	50	20	8	110

*Convergence parameter $h = 2.1$ cm.

1 - Number of electron positron pairs in event
2 - N_{total}, 3 - Number of events resulting from processes

other than $K_S^0 \rightarrow 3\pi^0$ decays, 4 - Number of $K_S^0 \rightarrow 3\pi^0$ decays,

5 - number of random events, 6 - number of nuclear interactions

Card 3/3

KUZIN, L.D.

USSR / Microbiology. Medical and Veterinary Microbiology. F-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 22053

Author : Kuzin, L.D., Berezhnoi, N.F., Sukhanova, N.P.

Inst :

Title : On the Prospectives of Obtaining a New Vaccine Against Anthrax of Farm Animals (Communication 2).

Orig Pub: Tr. Chkalovskogo s.-kh. in-ta, 1955, 7, 205-212

Abstract: A nonencapsulated avirulent culture of anthrax bacilli, whose properties are stably preserved, was obtained from the virulent strain #343 by means of direct cultivation. It is virulent only to white mice in a dose of 0.2 ml. This culture can form a reliable immunity in animals inoculated with it (intramuscularly, twice). The use of a 20% camphor oil solution stimulates the nervous system and assures immunity even in animals inoculated once. The spore vaccine, unlike the avirulent 24-hour culture, causes death in 11-12% of the inoculated guinea pigs. Part 1 see Ref. Zh.-Biol., 1955, 40326.

Card : 1/1

-49-

KUZIN, L. T.

PHASE I BOOK EXPLOITATION

376

Avtomaticheskoye upravleniye i vychislitel'naya tekhnika, vyp. 1.
(Automatic Control and Computing Technique, v. 1) Moscow,
Mashgiz, 1958. 302 p. 7,000 copies printed.

Ed.: Solodovnikov, V.V., Doctor of Technical Sciences, Professor;
Scientific Ed. of Publishing House: Polyakov, G.F.; Tech. Ed.:
Sokolova, T.F.; Managing Ed. for Literature on Machine Building
and Instrument Making (Mashgiz): Pokrovskiy, N.V., Engineer.

PURPOSE: The book is intended for engineers and scientific personnel.

COVERAGE: The book is a collection of eleven articles presented at a seminar on the theory and technique of automatic control and computing machines. The seminar was organized by the Scientific and Technical Society of Instrument Making, the Moscow Higher

Card 1/4

Automatic Control and (Cont.) 376

Technical School imeni Bauman, and the Moscow Aviation Institute imeni S.Ordzhonikidze. The Moscow Physics and Engineering Institute also participated in the seminar. The first five articles outline the theory of automatic control, the next four describe automatic control systems and system components, and the last two articles discuss differential analyzers. No personalities are mentioned.

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JP/mfd
1-19-59

9(0)

SOV/112-59-4-7470

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 4,
pp 144-145 (USSR)

AUTHOR: Kuzin, L. T.

TITLE: Some Problems of Synthesis of Pulse Follow-Up Systems Receiving
Steady-State Random Signals

PERIODICAL: V sb.: Avtomat. upravleniye i vychisl. tekhn. Nr 1. M., Mashgiz,
1958, pp 22-58

ABSTRACT: The block diagram of a typical pulse follow-up system is examined. Formulae for various signal spectra are derived; transfer functions of various pulse systems are derived by the z-transformation. Principles of the z-transformation are briefly set forth, and a table of the most widely used transformations is presented. Effect of a steady-state random signal on a pulse system is examined, as well as some problems of synthesis of the pulse follow-up systems receiving such a signal. An attempt is made to generalize

Card 1/2

SOV/112-59-4-7470

Some Problems of Synthesis of Pulse Follow-Up Systems Receiving Steady-

and to apply Wiener's results to the case of pulse systems. An example of determining the optimum transfer function of a follow-up system, with a constant input-noise spectral density, is examined. The problem of realization of the optimum transfer function by means of various pulse-follow-up systems is analyzed.

A.S.B.

Card 2/2

KUZIN, L. T.

PHASE I BOOK EXPLOITATION

SOV/4986

p. 2
Solodovnikov, Vladimir Viktorovich

Statisticheskaya dinamika lineynykh sistem avtomaticheskogo upravleniya (Statistical Dynamics of Linear Systems in Automatic Control) Moscow, Fizmatgiz, 1960. 655 p. 10,000 copies printed.

Ed.: O. K. Sobolev; Tech. Ed.: N. Ya. Muratova.

PURPOSE: This advanced textbook is intended for university engineering students, research scientists, and practicing engineers concerned with the design and calculation of the performance of linear control systems, particularly those subject to random inputs.

COVERAGE: The book deals with the mathematical theory, operating characteristics, and the design of linear servo-control systems, particularly those required to operate under conditions of random inputs. The book develops the usual theory of linear systems subject to specified input functions and then proceeds to extend

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this theory with the methods of mathematical statistics and the theory of random processes. It is partially based on the contents of an earlier book of the author, entitled Vvedeniye v statisticheskuyu dinamiku sistem avtomaticheskogo upravleniya (Introduction Into The Statistical Dynamics Of Automatic Control Systems), published in 1952. This volume, however, has been enlarged to about twice the size of the previous text, and many chapters have been entirely rewritten. Included are completely new chapters dealing with problems of analysis and synthesis of systems with variable parameters, discrete systems, devices and methods of treatment of experimental data, the general theory of synthesis on the basis of the concepts of the theory of games and decision functions, the synthesis of servosystems, and the analysis and synthesis of variable and discrete systems. The following scientists participated in the writing of this book: A. M. Batkov (Chapters X and XI) and L. T. Kuzin (Chapters XII and XIII). A number of sections were written by the author jointly with other scientists: section 9 of Chapter IV, and sections 6 to 9 of Chapter V

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with A. S. Uskov; section 18 Chapter VII with Yu. S. Val'denberg; sections 1, 2, 9 to 14 of Chapter VIII, and sections 1, 2, 6, of Chapter IX with P. S. Matveyev; and section 5 of Chapter IX with V. P. Alekperov. Section 4 of Chapter IX was written by E. N. Sorenkov. In addition to a very large number of footnotes, there are 154 references: 91 Soviet (18 of which are translations), 42 English, and 3 French.

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L 17967-63 ENT(d)/BDS AFFTC/ASD/APCC Pg-4/Pk-4/Pl-4/Po-4/Pq-4 BC
ACCESSION NR: AT3002080 S/2745/61/000/002/0039/0050

AUTHOR: Kuzin, L. T. 74

TITLE: Design for extrapolating discrete servosystems 9

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Vychislitel'naya tekhnika, no. 2, 1961, 39-50.

TOPIC TAGS: servosystem , discrete servosystem , extrapolating servosystem , selfadjusting servosystem , guided missile trajectory predictor , aircraft trajectory predictor

ABSTRACT: This theoretical paper deals with the design of a so-called "extrapolating" servosystem, which is defined as a special type of discrete system which produces a continuous output signal which, at discrete time moments is made to coincide with an input signal and in which, during the entire process, a polynomial is constructed to fit the antecedent discrete time points (or points close to them) and which, with the aid of that polynomial, produces an extrapolation which predicts the future discrete values of the input signal. Should there be a noncoincidence of the predicted value with the actual value of the input signal, a correction of the extrapolating polynomial is performed in consonance with the error signal

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ACCESSION NR: AT3002080

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generated. Such extrapolating devices will, no doubt, find useful application in the control of machine tools and in control devices which must extrapolate the trajectory of flight of guided missiles and aircraft. The paper sets forth the generation of a prescribed polynomial by means of integrators, comprising the construction of the characteristic equations of a third-order extrapolational system. The reaction of the system is examined with respect to actions consisting of: (a) A singular stepwise action, (b) a single velocity jump. Orig. art. has 10 numbered equations and 5 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 30Apr63

ENCL: 00

SUB CODE: CP, AC, GM

NO REF SOV: 004

OTHER: 004

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/6051

Kuzin, Lev Timofeyevich

Raschet i proyektirovaniye diskretnykh sistem upravleniya (Designing of Discrete Control Systems) Moscow, Mashgiz, 1962. 682 p. Errata slip inserted. 9000 copies printed.

Reviewer: V. P. Perov, Doctor of Technical Sciences; Ed.: V. A. Karabanov, Candidate of Technical Sciences; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Means of Automation and Instrument Construction: N. V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for engineers, students in schools of higher education, aspirants, and scientific personnel specializing in the field of discrete control systems.

Card 1/12

ACCESSION NR: AP4036516

S/0103764/025/005/0718/0723

AUTHOR: Varshavskiy, A. Ye. (Moscow); Kuzin, L. T. (Moscow)

TITLE: Investigation of discrete variable-parameter systems by simulators

SOURCE: Avtomatika i telemekhanika, v. 25, no. 5, 1964, 718-723

TOPIC TAGS: automatic control, discrete automatic control, variable parameter automatic control, simulator

ABSTRACT: An extension of Duncan's theory of continuous systems ("Response of Linear Time-Dependent Systems to Random Inputs," J. Appl. Phys., May, 1953) over the case of discrete systems is reported. Discrete automatic-control systems described by linear difference variable-coefficient equations are considered. A set of difference equations describing the dispersion of the system output signal is developed. Unsolvable by analytical means, this set can be solved on a computer or a digital differential analyzer. The method permits determining

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ACCESSION NR: AP4036516

the mean square of a random signal of a discrete linear variable-parameter control system. The entire series of dispersion values can be obtained by a single simulation. Orig. art. has: 4 figures and 20 formulas.

ASSOCIATION: none

SUBMITTED: 28Nov62

DATE ACQ: 03Jun64

ENCL: 00

SUB CODE: DP, IE

NO REF SOV: 003

OTHER: 002

Card 2/2

KUZIN, L.T., doktor tekhn. nauk, prof.

Bibliography. Elektrichestvo no.12:83-84 D '65.
(MIRA 18:12)

MALYAROV, B.; KUZIN, M.

Let us determine the very best kinds of mechanization of inter-
farm swine-fattening farms. Sil'. bud. 11 no.9:15-16 S '61.

(MIRA 14:11)

1. Direktor Odes'kogo kilialu Ukrndiprosil'gospu (for Malyarov).
2. Golovniy spetsialist Odes'kogo filialu Ukrndiprosil'gosupu
(for Kuzin).
(Swine houses and equipment)

KUZIN, M.

Improving and reducing expenses of the administrative apparatus
is an important state task. Fin.SSR 15 no.11:7-15 N'54.
(MLBA 8:2)

(Russia--Politics and government)(Industrial management)

KUZIN, M.

Improve the administrative apparatus and strengthen staff discipline
in every way. Fin.SSSR 16 no.12:9-19 D '55. (MIRA 9:2)

1.Chlen kollegii Ministerstva finansov SSSR.
(Russia--Executive departments) (Industrial organization)(Finance)

KUZIN, H.

KUZIN, M.

Improving the administrative apparatus. Fin.SSSR 18 no.2:
~~44-46~~ F '57. (MLRA 10:5)

1.Nachal'nik TSentral'nogo shtatnogo upravleniya.
(Industrial management)

KUZIN, M.

Improving the administrative apparatus and staff discipline. Fin. SSSR
18 no.4:18-27 Ap '57. (MIRA 10:6)

(Industrial management)

KUZIN, M.

Improve work of financial organs on staff efficiency. Fin. SSSR
19 no.1:22-28 Ja '58. (MIRA 11:2)

1. Nachal'nik Tsentral'nogo shtatnogo upravleniya Ministerstva
Finansov SSSR. (Finance)

KUZIN, M.

Ways to improve and reduce the cost of the administrative apparatus.
Fin. SSSR 20 no.1:9-16 Ja '59. (MIRA 12:2)

1. Chlen Kollegii Ministerstva finansov SSSR.
(Russia--Economic policy)

KUZIN, M.

Increasing the control over the staff and estimate discipline. Fin.
SSSR 21 no.12:3-10 D '60. (MIRA 13:12)

1. Chlen Kollegii Ministerstva finansov SSSR.
(Finance) (Industrial management)

KUZIN, M.

Improve and reduce the cost of the administrative apparatus.
Fin. SSSR 21 no.2:8-16 F '60. (MIRA 13:1)

1.Chlen Kollegii Ministerstva finansov SSSR.
(Finance)

KUZIN, M.

Financial organs and the improving of the administrative apparatus.
Fin. SSSR 22 no.11:8-15 N '61. (MIRA 14:11)

1. Chlen Kollegii Ministerstva finansov SSSR.
(Industrial management) (Finance)

KUZIN, M.

For the further improvement of the administrative apparatus.
Fin. SSSR 23 no.9:8-15 S '62. (MIRA 15:9)

1. Chlen kollegii Ministerstva finansov SSSR.
(Industrial management) (Finance)

KUZIN, M.

Improve and reduce the cost of the administrative apparatus.

Sots. trud 8 no.7:90-99 J1 '63.

(MIRA 16:10)

1. Chlen Kollegii Ministerstva finansov SSSR.

KUWEN, N. D.

Thermotechnical controlling and measuring instruments; organization, maintenance and repair. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit, lit-ry, 1949. 297 p. (50-22160)

QC274.K8

KUZIN, N.D.

MIKHIN, M.K.; GORIN, V.K.; KUZIN, M.D., inzhener, redaktor; SHAVEL'ZON, M.V.,
inzhener, redaktor; CHARIKHOV, L.A., inzhener, redaktor.

[Automatic control of Martin furnaces] Avtomaticheskoe regulirovanie
martenovskikh pechei. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry
po chernoi i tsvetnoi metallurgii, 1953. 503 p. (MLRA 7:6)
(Open-hearth process) (Automatic control)

KUZIN, M. D. I

7651. KUZIN, M. D. I -- Teplotekhnicheskiye kontrol'noizmeritel'nyye pribory. (ucheb. posobiye dlya remesl. uchilishek). 1224. 2-ye. ispr. I dop. moskva-sverdlovsk, mashgiz, (uralo-sib. otd-niye), 1954. 400 s. s ill. 23 sm. 25.000 ekz. (1-y zavod 1-5 tys.) 7r. 90 k. v per. -- Bibliogr: s. 397 (12 nazv.) -- (55-3745)P

621.036.5 & (016.3)

Mazanov, F. partiynaya organizatsiya zavoda v bor'be za vypolneniye pyatiletnego plana. (1-y gos. podshipnikovyy zavod im. L. M. Kaganovicha). --sm. 7335

SO: Knizhnaya Letopsis', Vol. 7, 1955

KUZIN, M. D.

N/5
662.41
.K9

Teploekhnicheskkiye Kontrol'no-Izmeritel'nyye Pribory (Thermo-technical Control and Measurement Instruments, by) M. D. Kuzin I I. I. Faktovskiy. Izd. 2, Isprav, I Dop. Moskva, Mashgiz, 1955.

399 P. Diagr., Tables.

GORDON, Mark Moiseyevich; KUZIN, M.D., redaktor; LUCHKO, Yu.V., redaktor
izdatel'stva; KOVALENKO, N.I., tekhnicheskii redaktor

[Calculation of automatic control devices for thermal processes in
metallurgy] Raschety ustroistv avtomaticheskogo regulirovaniia
toplovykh protsessov v metallurgii. Sverdlovsk, Gos.nauchno-tekhn.
izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-
nie, 1956. 134 p.
(Automatic control) (MIRA 9:8)

BARANOVSKIY, Petr Grigor'yevich; KUZIN, M.D., red.; KRAPIVIN, B.G.,
red.izd-va; MATLYUK, R.M., tekhn.red.

[Adjustment of automatic controllers in metallurgy] Nastroyka
avtomaticheskikh reguliatorov v metallurgicheskoi promyshlennosti.
Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi
metallurgii, Sverdlovskoe otd-nie, 1959. 125 p. (MIRA 12:8)
(Metallurgy) (Automatic control)

REFERENCE BOOK EXCERPTATION

SOV/3902

Kuzin, Mikhail Dmitriyevich, and Ivan Ivanovich Paktovskiy

Teplotekhnicheskiye kontrol'no-izmeritel'nyye pribory (Heat-Engineering Control and Measuring Instruments) 3rd ed., rev. and enl. Moscow, Mashgiz, 1959. 408 p. 24,000 copies printed.

Reviewer: Yu. G. Yaroshenko, Candidate of Technical Sciences; Exec. Ed. (Ural Siberian Division, Mashgiz): T.M. Somova, Engineer; Tech. Ed.: N.A. Dugina.

PURPOSE: This textbook is intended for technical and trade schools. It may also be used by workers and foremen to improve their skill.

COVERAGE: The book deals with measuring and control instruments used in heat engineering. The devices described are said to be all of Soviet design and make. Instructions are given for the installation, adjustment, maintenance, and repair of these instruments. Problems of repair and adjustment of instruments during the erection of industrial installations are stressed. The prospects for further development of instruments and control devices operating on optico-acoustical, ultrasonic, magnetic, and radioactive principles are

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Heat-Engineering Control (Cont.)

SOV/3902

discussed. Even wider application is predicted for electronic semiconductor instruments. No personalities are mentioned. There are 12 references, all Soviet.

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Card 2/7

KALASHNIKOV, V.I., inzh.; KUZIN, M.D., inzh.; ROZENFEL'D, V.S., inzh.;
SHAVEL'ZON, M.V., inzh.

Automatization of technological processes in autoclaves.
Stroi. mat. 5 no.6:18-20 Je '59. (MIRA 12:8)
(Autoclaves) (Automatic control)

TKHORZHEVSKIY, Vladislav Pavlovich; PEREVEZENTSEV, Ivan Gavrilovich;
KUZIN, M.D., retsenezent; KHLEPETIN, Yu.M., red.; DUGINA, N.A.,
tekh.n.red.

[Manufacture of instruments for tropical countries] Konstruiro-
vanie priborov dlia stran s tropicheskim klimatom. Moskva, Gos.
nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 153 p.

(MIRA 13:10)

(Instrument manufacture)

KUZIN, Mikhail Dmitriyevich; KVIRING, V.E., retsenzent; FEDOTOV, B.A.,
retsenzent; GORDON, M.M., red.; SYRCHINA, M.M., red. izd-va;
TURKINA, Ye.D., tekhn. red.

[Assembly and use of control and measuring instruments] Montazh i
ekspluatatsiya kontrol'no-izmeritel'nykh priborov. Sverdlovsk, Gos.
nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii.
Sverdlovskoe otd-nie, 1961. 256 p. (MIRA 14:7)
(Automatic control) (Measuring instruments) (Steelworks)

SHAVEL'ZON, M.V., inzh; KUZIN, M.D., inzh.

Overall automation of the thermal conditions of open-hearth
furnaces. Mont. i spets. rab. v stroi. 24 no.10:12-14 '62. (MIRA15:10)

1. Spetsial'noye proyektno-konstruktorskoye byuro tresta
Uralmontazhavtomatika.

(Automatic control)
(Open-hearth furnaces)

KUZIN, M.F.

Using the biogeochemical method of prospecting for rare metal
deposits. Razved.i okh.nedr 25 no.11:16-20 N '59.
(MIRA 13:5)

1. Ministerstvo geologii i okhrany nedr SSSR.
(Metals, Rare and minor) (Geochemical prospecting)

YESENOV, Shakhmardin Yesenovich; KUZIN, Mikhail Fedorovich;
YERDZHANOV, Kariboz Nagayevich; IVKIN, N.M., otv. red.;
SAGUNOV, P.G., red.izd-va

[Prospecting for pegmatite deposits, piezooptic and ceramic
mineral resources in Kazakhstan] Poiski i razvedka pegmati-
tovykh mestorozhdenii p'ezoopticheskogo i keramicheskogo mi-
neral'nogo syr'ia na territorii Kazakhstana. Alma-Ata, Ka-
zakhskii nauchno-issl. in-t mineral'nogo syr'ia MG i ON
KazSSR, 1963. 109 p. (MIRA 17:1)

AMIYAN, Vartan Aleksandrovich; ANISIMOV, Yelizar Pinkhasovich; KUZIN, M.I.,
redaktor; KOVALEVA, A.A., redaktor; POLOSINA, A.S., tekhnicheskii
redaktor.

[Manual on subsurface and major repair of oil wells] Spravechnik po
podzemnomu i kapital'nomu remontu skvashin. Moskva, Gosudarstvennoe
nauchno-tekhn. izd-vo nefti i gorno-toplivnoi lit-ry, 1956. 339p.
(Oil wells--Equipment and supplies--Repairing) (MIRA 9:6)

KUZIN, M.I.

GRIGORYAN, Grigoriy Markovich, doktor tekhnicheskikh nauk; ALEKSIN, Aleksandr Georgiyevich, inzhener; ZAKS, Saveliy L'vovich, kandidat tekhnicheskikh nauk; KUZIN, Mikhail Ivanovich, inzhener; POLOZKOV, Vladimir Tikhonovich, kandidat tekhnicheskikh nauk; SUKHANOV, Vasilii Pavlovich, inzhener; SULTANOV, D.K., inzhener; STREL'CHUK, Nikolay Antonovich, inzhener; CHERNYAK, Il'ya L'vovich, inzhener; KUSHELEV, V.P., retsenzent; ROYZEN, I.S., otvetstvennyy redaktor; ZAMARAYEVA, K.M., vedushchiy redaktor; KOVALEVA, A.A., vedushchiy redaktor; SAVINA, Z.A., vedushchiy redaktor; TROFIMOV, A.V., tekhnicheskiiy redaktor

[Safety engineering and fire prevention in the petroleum industry]
Tekhnika bezopasnosti i protivopozharnaya tekhnika v neftianoi promyshlennosti. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gornotoplivnoi lit-ry, 1956. 508 p. (MLRA 10:1)

(Petroleum industry--Safety measures)
(Fire prevention)

GRIGOR'YAN, G.S. [Hryhor'ian, H.S.], dots.; KISTANOV, Ya.A., dots.;
 FEFILOV, A.I., dots.; GENKINA, L.S. [Henkina, L.S.], dots.;
 VASIL'YEV, S.S. [Vasil'iev, S.S.], dots.; SEREBRYAKOV, S.V.,
 prof.; DNEPROVSKIY, S.P. [Dnieprovs'kyi, S.P.], prof.;
 PIROGOV, P.V. [Pyrohov, P.V.], dots.; GOGOL', B.I. [Hohol', BI.],
 dots.; SMOTRINA, N.A., dots.; KULIKOV, O.G. [Kulikov, O.H.],
 dots.; KUZIN, M.I., dots.; DEMIDYUK, V.F. [Demydiuk, V.F.], red.;
 SKVIRSKAYA, M.P. [Skvyrs'ka, M.P.], red.; LEVCHENKO, O.K., tekhn.
 red.; SERGEYEV, V.F. [Serhieiev, V.F.], tekhn. red.

[Soviet trade economics] Ekonomika radians'koi torhivli; pid-
 ruchnyk. [By] G.S.Grigor'ian ta inshi. Kyiv, Derzhpolitvydav
 URSR, 1962. 500 p. (MIRA 16:11)

(Russia—Commerce)

KUZIN, M.I., doktor meditsinskikh nauk

Syndrome of protracted crushing is a traumatic toxicosis. Khirurgiia
35 no. 5:16-24 My '59. (MIRA 13:10)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - zasluzhennyy
deyatel' nauki prof. N.N. Yelanskiy) I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M. Sechenova.
(EXTREMITIES (ANATOMY)--WOUNDS AND INJURIES)